Michael Shen

EDUCATION

University of Texas at Austin, College of Natural Sciences

Austin, TX

Present – May 2022

B.S. in Computer Science, Minor in Business

Coursework

Algorithms & Complexity

Computer Architecture

Linear Algebra

Data Structures

Modern Web Applications

Artificial Intelligence

Natural Language Processing

University of North Texas, Texas Academy of Mathematics and Science

Denton, TX

Computer Science Track August 2016 – May 2018

TECHNICAL EXPERIENCE / INTERNSHIPS

RigUp Austin, TX

Software Engineer Intern

June 2020 – August 2020

- Built a platform that discovers prospective business opportunities through React UI and data dashboards
- Migrated AWS cloud infrastructure to GCP applications and automated development with CircleCI
- Created NodeJS API to process Elasticsearch/Postgres queries and deployed to Google Kubernetes Engine
- Increased performance of data processing by 4x through a distributed computing and pub/sub design

Charles Schwab Dallas, TX

Software Engineer Intern

June 2019 – August 2019

- Developed customer account features on a large distributed system using Java and Spring MVC
- Collaborated with teams globally in an agile environment to deploy applications to Pivotal Cloud Foundry
- Increased code coverage on team's modules to >80% with JUnit tests and Gherkin BDD tests
- Deployed and supported scalable and high-quality products to achieve optimal customer experience

Computational Epidemiology Research Laboratory

Denton, TX

Research Assistant

August 2016 – May 2018

- Implemented a novel non-stochastic approach to modeling viral outbreaks through graph theory in Java/Perl
- Created a research paper outlining the impacts of quarantine/vaccination strategies on the disease dynamics
- Awarded Siemens Competition Semi-Finalist and 2nd in category at Texas State Science and Engineering Fair

TECHNICAL SKILLS

Programming Languages: Java, Python, Javascript, HTML/CSS, C++, SQL

Environments/Applications: UNIX, Git, Xcode, Android Studio

Application Development: React.js, Node.js, PostgreSQL, Elasticsearch, Spring, TensorFlow

DevOps Tools: GCP, AWS, Kubernetes, Docker, CircleCI

PROJECTS

UT Austin Convergent Build Team Developer

August 2018 – Present

Austin, TX

- Lead development on creating a MERN (MongoDB, Express, React, Node) web app from ground up to connect volunteers to individuals with disabilities
- Hosted technical meetings to produce product vision/roadmap and mentored team members on the tech stack

HONORS AND ACTIVITIES

Hack the Northeast June 2020

- Implemented ASL Buddy, a Python tool using a self-trained Tensorflow model to teach ASL
- Recognized as Most Viable Startup Hack out of >1000 participants (top 4% of hackathon)

Capital One Software Engineering Summit

May 2019

• Accepted to attend engineering summit overviewing the usage and implementation of modern technologies (AWS, iOS/Android, React) within tech companies